

REMARKS

As a supplemental reply to the Amendment filed on October 12, 2005, Claims 1-6, 9-11 and 13-30 are pending in this application. By this Supplemental Amendment, claims 1-4 and 9 are amended. The claim amendments introduce no new matter. Reconsideration of the application based on the above amendments and the following remarks is respectfully requested.

The Office Action, in paragraph 3, rejects claims 1-6, 9-11, 13-22 and 24-30 under 35 U.S.C. §103(a) as being unpatentable over Japanese Laid-Open Patent Application No. JP-A-09-197196 to Eguchi et al. (hereinafter "Eguchi") in view of U.S. Patent No. 6,773,169 to Ebeling et al. (hereinafter "Ebeling"). The Office Action, in paragraph 23, rejects claim 23 under 35 U.S.C. §103(a) as being unpatentable over Eguchi in view Ebeling as applied to claim 18 above, and further in view of U.S. Patent No. 5,707,684 to Hayes et al. (hereinafter "Hayes"). These rejections are respectfully traversed.

In place of the arguments made in the October 12 Amendment traversing the prior art rejections in support of the patentability of independent claims 1 and 3 and the claims depending therefrom, Applicant respectfully submits the following.

Eguchi teaches, with reference to Fig. 1, that the optical fiber and the optical element are very carefully aligned in the connecting part, and the connecting part is applied therebetween and stretched in order to attempt to ensure that the precise alignment of all three components is maintained throughout the fabrication process. Eguchi does not disclose a part of a second portion enclosed by a first portion and the second portion having an exposed surface as is recited, among other features, in at least independent claims 1 and 3.

Ebeling teaches a method for coupling a surface-oriented opto-electronic element with an optical fiber, and an opto-electronic element for carrying out such a method (col. 1, lines 11-14). Ebeling states that the coupling between an opto-electronic element or chip in an optical fiber, particularly, a mono mode fiber, represents a complex problem because the two

components must be aligned relative to one another to achieve a high coupling performance with high efficiency (col. 1, lines 15-19). Ebeling teaches a connecting part (region 4) that joins the optical surface and the surface of the lens 15, in addition to an exposed surface of the fiber core 11 of the optical fiber (see, e.g., Sig. 7 of Ebeling). The light emitted from the disclosed chip 3 enters the end surface of the lens 15 as well as the exposed surface of the optical fiber 11. Because some of the light received through the surface of the lens 15 does not enter the fiber core 11, that light is not transmitted via the optical fiber. Because the connecting structure recited in these claims joins the optical surface and only the exposed surface of the second portion (or the core) of the optical fiber, light loss is lessened.

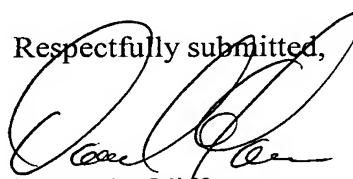
Independent claim 1 recites, among other features, an optical fiber having a first portion and a second portion, a part of the second portion being enclosed by the first portion, the second portion having an exposed segment; and a connecting part that joins the optical surface and only the exposed segment of the second portion of the optical fiber. Independent claim 3 recites, among other features, an optical fiber having a clad and a core, a part of the core being enclosed in the clad, the core having an exposed surface; and a connecting part that joins the optical surface and only the exposed surface of the core of the optical fiber. Any combination of Eguchi or Ebeling does not teach, nor would it have suggested, the combinations of all of the features recited in at least independent claims 1 and 3.

For at least the above reason, independent claims 1 and 3 are patentable over any combination of the applied prior art references. Additionally, claims 2, 4-6, 9-11, 13-17 and 25-28 are also neither taught, nor would they have been suggested, by any combination of the applied references for at least the respective dependence of these claims directly or indirectly on independent claims 1 and 3, as well as for the separately patentable subject matter that each of these claims recites.

Accordingly, reconsideration and withdrawal of the rejections of claims 1-6, 9-11 and 13-30 under 35 U.S.C. §103(a) as being unpatentable over any combination of the applied references, are respectfully requested.

In view of the foregoing, Applicant respectfully submits that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-6, 9-11 and 13-30 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,

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